

Abstract of the Invention

Method and apparatus for drying and/or cleaning a workpiece, such as an electronic part, semiconductor wafer, printed circuit board or the like. As the workpiece is withdrawn from a processing liquid, a selected drying liquid, such as hydrofluoroether (HFE), ethylated HFE, an HFE azeotrope or an ethylated HFE azeotrope, that has a very small surface tension, is volatile, and has a density that is greater than the processing liquid density, is sprayed on, dribbled on or otherwise transferred to an exposed surface of the workpiece. The exposed surface may be stationary, may be rotating or may be moving along a selected path. The workpiece can be dried in 5-60 seconds, or less, in most situations and can be cleaned using the invention. Drying and/or cleaning can be performed in a single workpiece process, a single workpiece continuous process or a batch process.